

IN THE CLAIMS:

1. (Currently Amended) A communication apparatus for communicating with a plurality of stations and executing regulation control at a time of congestion, comprising:

a congestion monitoring means for monitoring unit to monitor a congestion state, setting a congestion level and determining whether or not to perform regulation based on said congestion level;

wherein said congestion monitoring means unit uses at least one of a processor occupancy rate and a response time with respect to a received signal as an index at a time of setting said congestion level,

a traffic measuring means for measuring unit to measure a traffic intensity;

wherein said traffic measuring means unit measures the number of signals received from the stations as a traffic intensity,

a traffic comparison means for comparing unit to compare said traffic intensity with a preset traffic-regulation start traffic intensity when it is determined that regulation is to be performed; and

a regulation control means for performing unit to perform traffic regulation control when a comparison result shows that said traffic intensity is equal to or greater than said traffic-regulation start traffic intensity, and performing regulation control on a maintenance and operation process when said traffic intensity is smaller than said traffic-regulation start traffic intensity;

wherein said regulation control means sends an alarm to a maintenance terminal to stop the maintenance and operation process, when the traffic regulation control is performed;

and wherein said regulation control unit executes said traffic regulation control by changing stations to be regulated and a number of said stations to be regulated;

and wherein said regulation control unit includes a regulation pattern selection table which is comprised of patterns P1 to Pn set every cycle C1 to Cn of the processor and an order-of-regulation-targets table which is comprised of patterns P1 to Pn with identification numbers of the stations set in each pattern.

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and wherein if the cycle number of the processor is $C_a(1 \leq a \leq n)$ while the traffic regulation control is performed, said regulation control unit reads the pattern P_a of the same number as the cycle C_a of the processor from the regulation pattern selection table and selects the top N stations in the selected pattern by using the order-of-regulation-targets table, when the number of stations to be regulated is identified "N".

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The communication apparatus according to claim 1, wherein said regulation control means unit counts a number of signals received from a station to be regulated and computes a ratio of a signal to be regulated from a count value, whereby said regulation control means unit executes said traffic regulation control with a same congestion level in accordance with said ratio.

5. (Currently Amended) A mobile communication system for communicating with a plurality of stations and executing regulation control at a time of congestion, comprising:
a plurality of mobile communication exchanges for performing exchange control on signals with respect to radio stations; and
a mobile communication control station including a communication apparatus comprising a congestion monitoring means-for-monitoring unit to monitor a congestion state, setting a congestion level and determining whether or not to perform regulation based on said congestion level, a traffic measuring means-for-measuring unit to measure a number of signals received from said mobile communication exchanges as a traffic intensity, a traffic comparison means-for-comparing unit to compare said traffic intensity with a preset traffic-regulation start traffic intensity when it is determined that regulation is to be performed, and a regulation control means-for-performing unit to perform traffic regulation control when a comparison result shows that said traffic intensity is equal to or greater than said traffic-regulation start traffic intensity, and

performing regulation control on a maintenance and operation process when said traffic intensity is smaller than said traffic-regulation start traffic intensity,

wherein said congestion monitoring ~~means~~ unit uses at least one of a processor occupancy rate and a response time with respect to a received signal as an index at a time of setting said congestion level,

and wherein said traffic measuring ~~means~~ unit measures the number of signals received from the stations as a traffic intensity,

and wherein said regulation control ~~means~~ unit sends an alarm to a maintenance terminal to stop the maintenance and operation process, when the traffic regulation control is performed;

and wherein said regulation control unit executes said traffic regulation control by changing mobile communication exchanges to be regulated and a number of said mobile communication exchanges to be regulated;

and wherein said regulation control unit includes a regulation pattern selection table which is comprised of patterns P1 to Pn set every cycle C1 to Cn of the processor and an order-of-regulation-targets table which is comprised of patterns P1 to Pn with identification numbers of the stations set in each pattern.

and wherein if the cycle number of the processor is $Ca(1 \leq a \leq n)$ while the traffic regulation control is performed, said regulation control unit reads the pattern Pa of the same number as the cycle Ca of the processor from the regulation pattern selection table and selects the top N stations in the selected pattern by using the order-of-regulation-targets table, when the number of stations to be regulated is identified "N".

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The mobile communication system according to claim 5, wherein said regulation control ~~means~~ unit counts a number of signals received from a mobile communication exchange to be regulated and computes a ratio of a signal to be regulated from a

count value, whereby said regulation control ~~means~~ unit executes said traffic regulation control with a same congestion level in accordance with said ratio.

9. (Cancelled)

10. (Currently Amended) A client/server system for communicating with a plurality of clients and executing regulation control at a time of congestion, comprising:

a plurality of client units for requesting services;

a server unit comprising ~~a congestion monitoring means for monitoring~~ unit to monitor a congestion state, setting a congestion level and determining whether or not to perform regulation based on said congestion level, ~~a traffic measuring means for measuring~~ unit to measure a number of signals received from said client units as a traffic intensity, traffic comparison means for comparing said traffic intensity with a present traffic-regulation start traffic intensity when it is determined that regulation is to be performed, and ~~a regulation control means for performing~~ unit to perform traffic regulation control when a comparison result shows that said traffic intensity is equal to or greater than said traffic-regulation start traffic intensity, and performing regulation control on a maintenance and operation process when said traffic intensity is smaller than said traffic-regulation start traffic intensity,

wherein said congestion monitoring ~~means~~ unit uses at least one of a processor occupancy rate and a response time with respect to a received signal as an index at a time of setting said congestion level,

and wherein said traffic measuring ~~means~~ unit measures the number of signals received from the stations as a traffic intensity,

and wherein said regulation control ~~means~~ unit sends an alarm to a maintenance terminal to stop the maintenance and operation process, when the traffic regulation control is performed;

and wherein said regulation control unit executes said traffic regulation control by changing client units to be regulated and a number of said client units to be regulated;

and wherein said regulation control unit includes a regulation pattern selection table which is comprised of patterns P1 to Pn set every cycle C1 to Cn of the processor and a order-of-

regulation-targets table which is comprised of patterns P1 to Pn with identification number of the stations set in each pattern,

and wherein if the cycle number of the processor is $Ca(1 \leq a \leq n)$ while the traffic regulation control is performed, said regulation control unit reads the pattern Pa of the same number as the cycle Ca of the processor from the regulation pattern selection table and selects the top N stations in the selected pattern by using the order-of-regulation-targets table, when the number of stations to be regulated is identified "N".

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The client/server system according to claim 10, wherein said regulation control ~~means~~ unit counts a number of signals received from a client unit to be regulated and computes a ratio of a signal to be regulated from a count value, whereby said regulation control ~~means~~ unit executes said traffic regulation control with a same congestion level in accordance with said ratio.

14.-21. (Cancelled)